CONTENTS OF VOLUME 44

Aalders, L. E. See Hall, I. V., 433.
See also Hall, I. V., 491.
Allard, J., Richard, J., et Bélanger, J. A. Comparaison de deux methodes pour déterminer le moment d'irriguer le tabac jaune, 276.
Anderson, C. H. and **Hennig, A. M. F.** The effect of date of seeding and fertility level on the yield of wheat, oats, and barley in northwestern Alberta, 15.
Armstrong, J. M. See Robertson, R. W., 337.
Ashford, R. See Lawrence, T., 311.
See also Read, D. W. L., 384.
Aubé, C. and **Sackston, W. E.** Verticillium wilt of forage legumes in Canada, 427.
Baenziger, H. See Friesen, H. A., 288.
Barker, W. G. See Wood, G. W., 387.
See also Hall, I. V., 491.
Bassett, I. J. Air-borne pollen surveys in Manitoba and Saskatchewan, 7.
Bélanger, J. A. See Allard, J., 276.
Bendelow, V. M. See Sosulski, F. W., 509.
Bendelow, V. M. Inheritance of free beta-amylase in barley, 550.
Benedict, W. G. Low cost, efficient plant growth chambers, 229.
Best, K. F. See Forsberg, D. E., 100.
Bezeau, L. M. and **Sonmor, L. G.** The influence of levels of irrigation on the nutritive value of alfalfa, 505.
Bhan, V. M. See Pande, H. K., 376.
Bhar, D. S. See Hilton, R. J., 42.
Bhatty, R. S. Influence of nitrogen fertilization on the yield, protein, and oil content of two varieties of rape, 215.
Birk, L. A. and **Roadhouse, F. E. B.** Penetration of and persistence in soil of the herbicide atrazine, 21.
Blakely, R. M. and **Carlberg, C. W.** Swift tomato, 497.
Bubar, J. S. Leo birdsfoot trefoil, 219.
Buglass, E. Seed production of crested wheatgrass as influenced by various management practices, 66.
Burrage, R. H. Trends in damage by wireworms (Coleoptera: Elateridae) in grain crops in Saskatchewan, 1954–1961, 515.
Burrows, V. D. A rapid seedling test to distinguish Russell from Garry oats, 580.
Calder, F. W., Hayden, R., and **Fensom, D. S.** An *in situ* technique developed for studying the hardening process of legumes, 581.
Carlberg, C. W. See Blakely, R. M., 497.
Carson, R. B. See Miltimore, J. E., 175.
Chiasson, T. C. Effect of N, P, Ca, and Mg treatments on yield of barley varieties grown on acid soils, 525.
Chinn, S. H. F. See Ledingham, R. J., 47.
Chipman, E. W. and **Hope, G. W.** Forcing of rhubarb under lights, 325.
Chisholm, D. See Fox, C. J. S., 149.
Clark, R. V. Septoria development on oats as affected by host plant nutrition, 488.
Cole, A. F. W. See Macdowall, F. D. H., 410.
Collins, W. B. See Morgan, G. T., 272.
Corns, W. G., Vanden Born, W. H., and **Schraa, R. J.** Selective chemical control of couchgrass and bromegrass in Kentucky bluegrass sod, 296.
Craig, D. L. and **Stultz, H. T.** Aphid dissemination of strawberry viruses in Nova Scotia, 235.
Davidson, T. R. See George, J. A., 383.
Davidson, T. R. and **George, J. A.** Spread of necrotic ring spot and sour cherry yellows viruses in Niagara Peninsula orchards, 471.
Dobb, J. L. and **Elliott, C. R.** Effect of pasture sampling cages on seed and herbage yields of creeping red fescue, 96.
Dorrell, D. G. and **Downey, R. K.** The inheritance of erucic acid content in rapeseed (*Brassica campestris*), 499.
Downey, R. K. See Harvey, B. L., 104.
Downey, R. K. A selection of *Brassica campestris* L. containing no erucic acid in its seed oil, 295.
See also Dorrell, D. G., 499.
Dryden, R. D. See Molberg, E. S., 351.
Dubetz, S. and **Hill, K. W.** Effect of irrigated crop rotations on yield and soil fertility, 139.

Eaves, C. A., Forsyth, F. R., Leefe, J. S., and **Lockhart, C. L.** Effect of varying concentrations of oxygen with and without CO_2 in senescent changes in stored McIntosh apples grown under two levels of nitrogen fertilization, 458.
Elliott, C. R. See Dobb, J. L., 96.
Everett, C. F. Injury to oats (*Avena sativa*) by MCPA, 582.
Fensom, D. S. See Calder, F. W., 581.
Fisher, R. W. and **Kerr, E. A.** The effects of polybutene emulsions on greenhouse tomatoes and the control of leaf mold, 133.
Folkins, L. P. See Pritchard, G. I., 318.
Forsberg, D. E. and **Best, K. F.** The emergence and plant development of wild buckwheat (*Polygonum convolvulus*), 100.
Forsyth, F. R. See Eaves, C. A., 458.
Fox, C. J. S. Long-term effects of insecticides on wireworms (*Agriotes* spp.) of grassland in Nova Scotia, 32.
Fox, C. J. S., Chisholm, D., and **Stewart, D. K. R.** Effect of consecutive treatments of aldrin and heptachlor on residues in rutabagas and carrots and on certain soil arthropods and yield, 149.
Fox, C. J. S. The effects of five herbicides on the numbers of certain invertebrate animals in grassland soil, 405.
Freeman, J. A. Use of simazine for control of weeds in strawberries in coastal British Columbia, 555.
Friesen, H. A., Baenziger, H., and **Keys, C. H.** Morphological and cytological effects of dicamba on wheat and barley, 288.
See also Molberg, E. S., 351.
George, J. A. and **Davidson, T. R.** Further evidence of pollen transmission of necrotic ring spot and sour cherry yellows viruses in sour cherry, 383.
See also Davidson, T. R., 471.
Gfeller, F. See Halstead, R. L., 221.
Gore, R. F. See Sosulski, F. W., 381.
Gourley, C. O. and **MacNab, A. A.** *Verticillium dahliae* and *Gliocladium roseum* isolation from strawberries in Nova Scotia, 544.
Grainger, P. N. See Hodgson, W. A., 583.
Grant, M. N. Control of variation within plots in winter survival trials of wheat and rye, 167.
Vernalization and days to anthesis of winter wheat under controlled temperature and light, 446.
See also McKenzie, H., 485, 495.
Green, G. J. and **McKenzie, R. I. H.** Dangerous new races of oat stem rust and sources of resistance to them, 418.
Gross, A. T. H. and **Stevenson, G. A.** Resistance in *Melilotus* species to the sweetclover weevil (*Sitona cylindricollis*), 487.
Guyer, G. E. See McClanahan, R. J., 1.
Hall, I. V., Aalders, L. E., and **Townsend, L. R.** The effects of soil pH on the mineral composition and growth of the lowbush blueberry, 433.
Hall, I. V., Aalders, L. E., and **Barker, W. G.** A preliminary investigation of factors limiting lowbush blueberry production on Cape Breton Island, 491.
Halstead, R. L. and **Gfeller, F.** The cooking quality of field peas, 221.
Handford, R. H. See Putnam, L. G., 365.
Hansen, H. See Voisey, P. W., 585.
Harper, F. R. Control of root disease in peas by seed treatment in southern Alberta, 531.
Harris, G. K. See Heinrichs, D. H., 201.
Harvey, B. L. and **Downey, R. K.** The inheritance of erucic acid content in rapeseed (*Brassica napus*), 104.
Haslam, R. J. See Povilaitis, B., 126.
Hayden, R. See Calder, F. W., 581.
Heeney, H. B., Rutherford, W. M., and **MacQueen, K. F.** Some effects of gamma radiation on the storage life of fresh strawberries, 188.
Heeney, H. B., Ward, G. M., and **Rutherford, W. M.** Zinc deficiency in eastern Ontario orchards, 195.
Heinrichs, D. H. and **Harris, G. K.** Pasture and fodder attributes of oat varieties, 201.
See also Kilcher, M. R., 208.
Hennig, A. M. F. See Anderson, C. H., 15.
Hidiroglou, M. and **Tessier, J. L.** Note sur la composition et la digestibilité de la Vicia Cracca, 486.
Hill, K. W. Protein content of wheat as affected by agronomic practices, 115.
See also Dubetz, S., 139.
Hilton, R. J., Bhar, D. S., and **Teskey, B. J. E.** The effect of graft-wound protectants on the establishment and strength of scions on frameworked apple trees, 42.

Hodgson, W. A., and **Grainger, P. N.** Culture of *Phytophthora infestans* on artificial media prepared from rye seeds, 583.
Holmes, N. D. See McKenzie, H., 485.
Hope, G. W. See Chipman, E. W., 325.
Hougen, F. W. See Stefansson, B. R., 359.
Hubbard, W. A. and **Nicholson, H. H.** Irrigated grass–legume mixtures as summer pasture for yearling steers, 332.
Hurd, E. A. Root study of three wheat varieties and their resistance to drought and damage by soil cracking, 240.
Isaac, P. K. See Kenneth, R., 182.
Kalbfleisch, W. An evaporative spray-cooling system for glasshouses, 297.
Kenneth, R. and **Isaac, P. K.** *Cephalosporium* species parasitic on *Helminthosporium* (sensu late), 182.
Kerr, E. A. See Fisher, R. W., 133.
Keys, C. H. See Friesen, H. A., 288.
Kilcher, M. R. and **Heinrichs, D. H.** The comparative suitability of some grasses for turf in southern Saskatchewan, 208.
Kloek, M. See Voisey, P. W., 389.
Korven, H. C. See Wilcox, J. C., 439.
Lafrance, J. and **Tremblay, R.** An apparatus for separating grass and soil from turf for collecting wireworm larvae (Coleoptera: Elateridae) in organic soils, 212.
Langille, J. E. and **Warren, F. S.** Influence of time of seeding on establishment and persistence of species, and yield of forage mixtures, 78.
Lawrence, T. and **Troelsen, J. E.** An evaluation of 15 grass species as forage crops for southwestern Saskatchewan, 301.
Lawrence, T. and **Ashford, R.** Seed yield and morphological development of Russian wild ryegrass as influenced by grazing, 311.
Ledingham, R. J. and **Chinn, S. H. F.** Effect of grasses on *Helminthosporium sativum* in soil, 47.
Leefe, J. S. See Eaves, C. A., 458.
Lockhart, C. L. See Eaves, C. A., 458.
Loiselle, R. Inheritance of resistance to *Erysiphe graminis* f. sp. *hordei* in barley. I. The inheritance of resistance in two varieties immune to race 8, 259.
Macdowall, F. D. H. A simple measure of physical strength of cured tobacco leaf, 89.
Macdowall, F. D. H., Mukammal, E. I., and **Cole, A. F. W.** Direct correlation of air-polluting ozone and tobacco weather fleck, 410.
MacLaren, R. B. See Sterling, J. D. E., 53, 157.
MacLaren, R. B. and **Sterling, J. D. E.** A greenhouse evaluation of the effects of soil moisture, relative humidity, and *Helminthosporium sativum* infection on brittleness of barley awns, 157.
A greenhouse study of the effect of nitrogen, phosphorus, and potassium on brittleness and ash content of barley awns, 268.
MacLean, A. A. Evaluation of flame photometric determination of magnesium in plant material, 520.
MacNab, A. A. See Gourley, C. O., 544.
MacQueen, K. F. See Heeney, H. B., 188.
Manson, G. F. See Miles, J. R. W., 37.
Mason, J. L. See Miltimore, J. E., 175.
McArthur, J. M. and **Miltimore, J. E.** Extraction of alfalfa leaf cytoplasmic protein with modified Pirie disintegrator, 112.
See also Miltimore, J. E., 175.
McClanahan, R. J. and **Guyer, G. E.** The role of insects in the spread of cucumber mosaic virus, 1.
McCurdy, E. V. See Molberg, E. S., 351.
McDonald, W. C. See Waddington, J., 249.
McEvoy, E. T. The effects of pH and calcium on the uptake of radiophosphorus by flue-cured tobacco, 28.
Varietal differences in phosphorus level in leaves of flue-cured tobacco, 263.
McGregor, W. G. Influence of date of seeding on yield and yield components in flaxseed, 145.
McIver, R. N. See Thompson, J. L., 584.
McKeen, C. D. and **Sayre, R. M.** Control of *Verticillium dahliae* and *Meloidogyne incognita* in greenhouse tomatoes by soil fumigation, 466.
McKenzie, H., Holmes, N. D., Peterson, L. K., and **Grant, M. N.** A comparison of three plot sizes in studies of host resistance to the wheat stem sawfly, 485.
McKenzie, H. and **Grant, M. N.** A comparison of seeding rates in studies of host resistance to the wheat stem sawfly, 495.
McKenzie, H. Inheritance of bunt reaction in a Redman × S-615 wheat cross, 561.
McKenzie, R. I. H. See Green, G. J., 418.

Mikkelsen, T. T. See Smith, A. D., 213.
Miles, J. R. W., Sans, W. W., Wressell, H. B., and **Manson, G. F.** Growth-dilution as a factor in the decline of pesticide residues on alfalfa–grass forage, 37.
Miltimore, J. E. See McArthur, J. M., 112.
Miltimore, J. E., McArthur, J. M., Mason, J. L., and **Carson, R. B.** Bloat investigations. II. A comparison of the true protein and element contents of alfalfa hay from bloating and non-bloating farms, 175.
Molberg, E. S. Damage to flax by 2,4-D and MCPA applied in different volumes of water, 85.
Molberg, E. S., Friesen, H. A., McCurdy, E. V., and **Dryden, R. D.** Placement of di-allate and tri-allate for control of wild oats in wheat, 351.
Morgan, G. T. Effects of spring preplanting fumigation in strawberry soil in New Brunswick, 170.
Morgan, G. T. and **Collins, W. B.** The effect of organic treatments and crop rotation on soil populations of *Pratylenchus penetrans* in strawberry culture, 272.
Mortimore, C. G. and **Ward, G. M.** Root and stalk rot of corn in southwestern Ontario. III. Sugar levels as a measure of plant vigor and resistance, 451.
Mukammal, E. I. See Macdowall, F. D. H., 410.
Nicholson, H. H. See Hubbard, W. A., 332.
Nonnecke, I. L. and **Smillie, K. W.** Precision of field experiments with vegetable crops as influenced by plot size and shape. III. Potatoes, 57.
Pande, H. K. and **Bhan, V. M.** Effect of varying degree of soil manipulation on yield of upland paddy (*Oryza sativa*) and on associated weeds, 376.
Parups, E. V. The effect of maleic hydrazide on synthesis of lignin, 253.
Peake, R. W. Evaluation of cold-hardiness by controlled freezing of field-hardened forage crops, 538.
Pelton, W. L. Evaporation from atmometers and pans, 397.
Peterson, L. K. See McKenzie, H., 485.
Pigden, W. J. See Pritchard, G. I., 318.
Pittman, U. J. Magnetism and plant growth. II. Effect on root growth of cereals, 283.
Porritt, S. W. The effect of temperature on postharvest physiology and storage life of pears, 568.
Povilaitis, B., Haslam, R. J., and **Robinson, P.** Procedure for evaluating varieties of flue-cured tobacco for performance in soil infested with the black root rot fungus, 126.
Pritchard, G. I., Pigden, W. J., and **Folkins, L. P.** Distribution of potassium, calcium, magnesium, and sodium in grasses at progressive stages of maturity, 318.
Putnam, L. G. and **Handford, R. H.** Potential and actual populations of grasshopper nymphs in tilled and untilled cereal grain fields, 365.
Raine, J. Effect of raspberry crown borer, *Bembecia marginata*, on yield of loganberries, 75.
Read, D. C. Ceiling and wall blinds used for maintaining lower air and soil temperatures in greenhouses, 386.
Read, D. W. L. and **Ashford, R.** Further study on the effect of a white surface mulch on growth of sweet clover in the greenhouse, 384.
Richard, J. See Allard, J., 276.
Richardson, H. P. and **Westdal, P. H.** Experiments on control of the six-spotted leafhopper, *Macrosteles fascifrons*, and aster yellows on head lettuce with contact and systemic insecticides in Manitoba, 393.
Roadhouse, F. E. B. See Birk, L. A., 21.
Robertson, R. W. and **Armstrong, J. M.** Factors affecting seed production in *Trifolium medium*, 337.
Robinson, P. See Povilaitis, R. J., 126.
Ross, R. G. and **Stewart, D. K. R.** Mercury residues in potatoes in relation to foliar sprays of phenyl mercury chloride, 123.
Rutherford, W. M. See Heeney, H. B., 188.
See also Heeney, H. B., 195.
Sackston, W. E. See Aubé, C., 427.
Sans, W. W. See Miles, J. R. W., 37.
Sayre, R. M. and **Toyama, T. K.** The effect of root-knot nematodes on the yield of processing tomatoes, 265.
See also McKeen, C. D., 466.
Schraa, R. J. See Corns, W. G., 296.
Sims, R. P. A. Changes in fatty acid composition of the seeds of three soil-bearing species during increasing seed maturity, 217.
Smillie, K. W. See Nonnecke, I. L., 57.
Smith, A. D., Mikkelsen, T. T., and **Walker, P. H.** An apparatus for weekly measurement of precipitation and evaporation, 213.
Smoliak, S. Relationships of some growth characteristics of three grass species, 161.
Sonmor, L. G. See Bezeau, L. M., 505.

Sosulski, F. W. and **Gore, R. F.** The effect of photoperiod and temperature on the characteristics of flaxseed oil, 381.
Sosulski, F. W. and **Bendelow, V. M.** The effect of irrigation on the agronomic and malting characteristics of barley, 509.
Stefansson, B. R. and **Hougen, F. W.** Selection of rape plants (*Brassica napus*) with seed oil practically free from erucic acid, 359.
Sterling, J. D. E. and **MacLaren, R. B.** A greenhouse method of rearing the barley jointworm, *Tetramesa hordei*, with observations on the biology and host–plant relations of the insect, 53.
See also MacLaren, R. B., 157, 268.
Stevenson, G. A. See Gross, A. T. H., 487.
Stewart, D. K. R. See Ross, R. G., 123.
See also Fox, C. J. S., 149.
Storgaard, A. K. See Waddington, J., 249.
Stultz, H. T. See Craig, D. L., 235.
Teskey, B. J. E. See Hilton, R. J., 42.
Tessier, J. L. See Hidiroglou, M., 486.
Thompson, J. L. and **McIver, R. N.** A cereal rod-row plot harvester, 584.
Townsend, L. R. See Hall, I. V., 433.
Toyama, T. K. See Sayre, R. M., 265.
Tremblay, R. See Lafrance, J., 212.
Troelsen, J. E. See Lawrence, T., 301.
Vanden Born, W. H. See Corns, W. G., 296.
Voisey, P. W. and **Kloek, M.** A portable leaf area measuring instrument, 389.
Voisey, P. W. and **Hansen, H.** Timers to control field instrumentation, 585.
Waddington, J., McDonald, W. C., and **Storgaard, A. K.** A comparative study of methods of inoculating alfalfa with *Leptosphaerulina briosiana*, 249.
Walker, P. H. See Smith, A. D., 213.
Ward, G. M. See Heeney, H. B., 195.
See also Mortimore, C. G., 451.
Ward, G. M. Observations of root growth in the greenhouse tomato, 492.
Warren, F. S. See Langille, J. E., 78.
Westdal, P. H. See Richardson, H. P., 393.
Wilcox, J. C. and **Korven, H. C.** Effects of weather fluctuations on the scheduling of irrigation, 439.
Wilner, J. Seasonal changes in electrical resistance of apple shoots as a criterion of their maturity, 329.
Wilson, D. B. Interactions in forage yield trials, 344.
Wood, G. W. and **Barker, W. G.** Preservation of blueberry pollen by the freeze-drying process, 387.
Wressell, H. B. See Miles, J. R. W., 37.